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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,892	05/26/2005	Joel Fournier	026032-4822	4206

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EXAMINER	
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ART UNIT	PAPER NUMBER
2889	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/511,892	FOURNIER, JOEL	
	Examiner	Art Unit	
	FATIMA N. FAROKHROOZ	2889	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 April 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Detailed Action

Continued Examination under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Applicant's submission filed on 04/10/09 has been entered.

Claims 1-22 remain pending in the application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-12, 14-22 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Tanabe et al (US 6252356).

Regarding claim 1, Tanabe teaches a display device of the thin-film electroluminescent display type (see at least Fig.7 and its corresponding text), comprising: a first layer having a first electroluminescent material 19, wherein the first electroluminescent material forms a first pattern (19A and 19B) ; a second layer 18

forming a transparent front electrode ; a third layer having at least one first rear electrode 26, with a shape corresponding to the first pattern 19, the first layer being between the second layer and the third layer; a fourth layer 22 behind the third layer and having a second electroluminescent material, wherein the second electroluminescent material forms a second pattern (22A and 22B) that corresponds to a negative image of the first pattern; and a fifth layer 28 (28A and 28B) with at least one second rear electrode, with a shape corresponding to the second pattern 22 and masking an area which is not covered by the first rear electrode 26 (since electrode 28 masks (covers) area not covered by electrode 26).

Tanabe does not teach that the second electroluminescent material forms a second pattern that corresponds to a negative image of the first pattern. However, Tanabe teaches that the second pattern 22 corresponds to displays 13 and 14 of Fig.4 and the first pattern 19 corresponds to displays 10 and 11 in Fig.1. Further Tanabe teaches that different indications (displays) may be displayed by changing the combination of selected transparent electrode layers and the back electrode layer when applying voltage to each transparent electrode layer and the back electrode layer (col.6, lines 6-12) in order to achieve specific display patterns.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to pattern the various EL layers and to apply voltages, as disclosed by Tanabe, so that different indications (displays) may be displayed in order to achieve different/specific display patterns.

Regarding claim 9, Tanabe teaches a display device comprising: luminescent material, wherein the luminescent material comprises: a first layer comprising first luminescent material, wherein the first luminescent material forms a first pattern; and a second layer comprising second luminescent material: wherein the second luminescent material forms a second pattern that corresponds to a negative image of the first pattern (see rejection in claim 1 above), and wherein the second luminescent material may be controlled to be illuminated to mask a space in the first luminescent material; and electrodes configured to control illumination of the luminescent material such that the luminescent material can be controlled to display information; wherein all of a display background can be controlled to be illuminated by luminescent material (col.2,lines 51-65;col.4,lines 58-68;col.6,lines 32-50;col.6,lines 14-31;therefore the control methodology/voltage application disclosed by Tanabe can be applied to any given display configuration). Also see rejection in claim 1 above.

Regarding claim 18, Tanabe teaches a display device comprising: luminescent material, comprising: a first layer having first luminescent material, wherein the first luminescent material forms a first pattern; and a second layer having second luminescent material, wherein the second luminescent material forms a second pattern that corresponds to a negative image of the first pattern, and wherein the second luminescent material may be controlled to be illuminated to mask a space in the first luminescent material; and electrodes configured to control illumination of the

luminescent material such that the luminescent material can be controlled to display information; wherein the luminescent material can be controlled such that no areas are visible between portions of the luminescent material controllable to display information (see rejection in claims 1 and 9 above).

Regarding claim 22, Tanabe teaches a display device for use in an automobile, comprising: a first electroluminescent active element located in a first plane, wherein the first electroluminescent active element forms a first pattern; and a second electroluminescent active element located in a second plane different than the first plane, wherein the second electroluminescent active element forms a second pattern that corresponds to a negative image of the first pattern, and wherein the second electroluminescent active element masks a space in the first electroluminescent active element (see rejection in claim 1 above).

Regarding claim 2, Tanabe teaches a display device (Fig.7) wherein the second rear electrode 28 overlaps an edge of the first rear electrode 26.

Regarding claim 3, Tanabe teaches a display device (Fig.7), wherein the first rear electrode 26 covers a surface corresponding to a display background and has at least one hollow area (hollow area is considered as the areas wherein 26 is not present), the second rear electrode (28) masking at least part of the hollow area. Also see rejection in claim 1 above.

Regarding claim 4, Tanabe teaches a display device (Fig.7), wherein the first rear electrode 26 has several hollow areas (hollow area is considered as the areas wherein 26 is not present; see hollow areas wherein 26 is not present in several regions in Fig.7), and the fifth layer has second rear electrodes 28 shaped so as to mask the hollow areas such that the first and second rear electrodes together mask all of the display background. Also see rejection in claim 1 above.

Regarding claim 5, Tanabe teaches a display device (Fig.7), wherein the first and second rear electrodes may be activated so as to display no information (See col.5, lines 52 to col.6, lines 30, wherein the second electrodes may be activated so as to display no information).

Regarding claim 6, Tanabe teaches a display device, wherein the electroluminescent layers are formed from an electroluminescent ink (see Abstract).

Regarding claim 7, Examiner note: the later portion of this claim relates to a process. The device not the process is considered germane to the claim, thus, examination will depend only on the structural limitation of **the electrodes.**

Regarding claim 8, Tanabe teaches a display device (Fig.7), wherein the electroluminescent material of the first layer (19) and the fourth layer (22) can be

controlled such that no areas are visible between portions of the electroluminescent material controllable to display information (see col.8, col.2 and 3) in order to achieve multiple patterns or displays (see col.3, lines 37-67, also see col.5, lines 52 to col.6, lines 32).

Regarding claim 10, Tanabe teaches a display device (Fig.7), wherein the luminescent material of the first layer 19 and the luminescent material of the second layer 22 are separately controllable (to display images such as Fig.1 and 4).

Regarding claim 11, Examiner note: the later portion of this claim (printed on the first layer) relates to a process. The device not the process is considered germane to the claim, thus, examination will depend only on the structural limitation of **the luminescent material.**

Regarding claim 12, Tanabe teaches a display device (Fig.7), wherein the electrodes comprise: a first electrode 18 associated with control of a section of luminescent material of the first layer 19; a second electrode 26 associated with control of the section of luminescent material of the first layer; and a third electrode 28 associated with control of a section of luminescent material of the second layer (also see rejection in claims 1 and 9 above).

Regarding claim 14, Tanabe teaches a display device (Fig.7), wherein the second electrode 26 is located in front of the first layer 19 and the second layer 22 ; the first electrode 18 is located behind the first layer 19; and the third electrode 28 is located behind the second layer 22.

Regarding claim 15, Tanabe teaches a display device (Fig.7), wherein the third electrode 28 overlaps the first electrode 18.

Regarding Claim 16, Tanabe teaches display device, wherein the first layer 19 has a first set of areas that can be controlled to be illuminated, the second layer 22 has a second set of areas that can be controlled to be illuminated.

Regarding claim 17, Tanabe teaches a display device (Fig.7), wherein the luminescent material can be controlled such that no areas are visible between portions of the luminescent material controllable to display information (see ***voltage controllable*** disclosure for various indications/displays in Tanabe).

Regarding Claim 19, Tanabe teaches display device, comprising a first layer 19 having first luminescent material and a second layer 22 having second luminescent material, wherein the first luminescent material may be controlled to be illuminated to display information.

Regarding claim 20, Tanabe teaches a display device (Fig.7), wherein all of a display background can be controlled to be illuminated by luminescent material (***see text as well as background illumination*** in for numerals 13,14 and 10,11 in Fig.1 and 4 of Tanabe).

Regarding claim 21, Tanabe teaches a display device (Fig.7), comprising, a first layer 18 having a first electrode, a second layer, behind the first layer, having luminescent material 19, a third layer, behind the second layer, having a second electrode 26, a fourth layer, behind the third layer, having luminescent material 22, and a fifth layer behind the fourth layer, having a third electrode 28.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tanabe et al (US 6252356) further in view of Mitsumori (US 4777402).

Tanabe teaches the invention set forth above (see rejection in Claim 12 above). Tanabe is silent regarding a display device, wherein the first electrode is also associated with control of the section of luminescent material of the second layer.

In the same field of endeavor, Mitsumori teaches an organic display device (Prior Art Fig.3) wherein the first electrode (6) is also associated with control of the section of luminescent material (4) of the second layer and the control of the section of luminescent material (4) of the first layer (8) in order to achieve multicolor display (see col.1, lines 30-49).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the electrode, as disclosed by Mitsumori in the organic display device of Tanabe in order to achieve multicolor display.

Other Prior Art Cited

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

US 5416494 teaches segmented electrodes with hollow areas between them.

Response to Arguments

The arguments filed in the communication on 01/21/09 are considered but are moot in view of new grounds of rejection by the amended claims.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fatima Farokhrooz whose telephone number is (571)-272-6043. The examiner can normally be reached on Monday- Friday, 9 am - 5 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Minh-Toan Ton can be reached on (571) 272-2303. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-21 7-91 97 (toll-free).

/Fatima N Farokhrooz/
Examiner, Art Unit 2889

/Joseph L. Williams/
Primary Examiner, Art Unit 2889